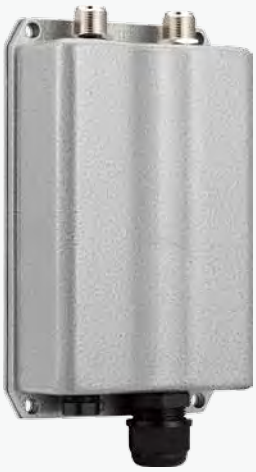
IWF 5210

IP68 Outdoor 3-in-1 AP/Repeater/CPE
802.11a/b/g/n, Single RF, Dual Band



Main Features

- IEEE 802.11 a/b/g/n for transmission rate up to 300Mbp
- Multiple operating mode–AP/Repeater/CPE mode
- IP68 rated metal housing with -25 to +70°C operating temperature
- Gigabit Ethernet with uplink port powered with standard IEEE 802.3at PoE
- Venting window with Teflon membrane for balancing air pressure
- Comprehensive security encryption with WEP, WPA/WPA2, IEEE 802.1X or PSK
- Layer-2 Wireless Firewall gives protection from wireless attacks
- Multiple Virtual APs for grouping policy management
- Tunnel-based AP management by backend AP controller

Product Overview

The IWF 5210 is a single radio Wi-Fi 802.11a/b/g/n outdoor device with versatile functions which includes AP, Repeater, and CPE mode. Its rugged IP68-rated metal housing is weatherproof, pressure balancing, water-tight and rust-resistant, making it an ideal solution for deployments in harsh conditions, such as outdoor or industrial environments.

When configured in AP mode, IWF 5210 operates as an AP station with wall-penetrating high-power signal and long-range coverage to serve Wi-Fi clients. Furthermore, IWF 5210 with multiple SSIDs is capable of acting as multiple Virtual APs (VAPs). By tagging the traffic from each VAP with a unique VLAN ID, it allows for segmenting a corporate network using VLANs to protect critical resource. In addition, the AP can be set up as a Mesh node by establishing multiple WDS links to bridge neighbor access points together. When operating in CPE (Client) mode, it provides the host device the Wi-Fi connection with roaming capability. CPE mode can also serve as Wi-Fi modem to receive wireless signal over the last-mile internet feed from WISPs. IWF 5210 can be configure to Repeater Mode allows it to help extend the range of your wireless network.

Specifications

Wireless Radio

- Wireless interface: IEEE a/b/g/n selectable dual band radio operating in 2.4GHz or 5GHz frequencies
- Wireless architecture:
  - AP mode
  - WDS mode
  - Repeater mode
  - CPE mode
  - Modulation
  - OFDM (64-QAM, 16-QAM, QPSK, BPSK)
  - DSSS (CCK, DBPSK, DQPSK)
- Channels:
  (1) USA: 1 ~ 11, 36, 40, 44, 48, 52 ~ 64, 100 ~ 136, 149 ~ 165
  (2) Japan: 1 ~ 13, 36, 40, 44, 48, 52 ~ 64, 100 ~ 140
  (3) Europe: 1 ~ 13, 36, 40, 44, 48, 52 ~ 64, 100 ~ 140
- Data rate with auto fallback:
  (1) 802.11a: 6 ~ 54 Mbps
  (2) 802.11b: 1 ~ 11 Mbps
  (3) 802.11g: 6 ~ 54 Mbps
  (4) 802.11n: 6.5 ~ 300Mbps
- Transmit Power: (with one stream)
  (1) 802.11a: 16dBm@54Mbps ±2dB
  (2) 802.11b: 25dBm@11Mbps ±2dB
  (3) 802.11g: 22dBm@54Mbps ±2dB
  (4) 802.11n 5G HT20 & HT40: 15dBm@MCS7 ±2dB
  (5) 802.11n 2.4G HT20 & HT40: 21dBm@MCS7 ±2dB
- Receiver Sensitivity:
  (1) 802.11a: -89dBm@54Mbps ±2dB
  (2) 802.11b: -93dBm@11Mbps ±2dB
  (3) 802.11g: -91dBm@54Mbps ±2dB
  (4) 802.11n 5G HT20: -83dBm@MCS0 ~ -65dBm@MCS7
  (5) 802.11n 5G HT40: -80dBm@MCS0 ~ -62dBm@MCS7
  (6) 802.11n 2.4G HT20: -85dBm@MCS0 ~ -67dBm@MCS7
  (7) 802.11n 2.4G HT40: -82dBm@MCS0 ~ -62dBm@MCS7

Multiple Operating Modes

- AP mode
- WDS mode (WDS bridge): support up to 4 WDS links
- Repeater mode: Acting as AP and STA client simultaneously
- CPE mode (Clint gateway)

Gateway Features in CPE Mode

- IP sharing on the LAN side for multiple users (subscribers) to get access to the Internet by built-in NAT mode
- Built-in DHCP server for issuing local IP address

- Built-in DDNS/DNS client
- Uplink and downlink bandwidth management
- IP/Port forwarding and DMZ

Access Point Features
- Number of ESSIDs (Virtual APs): 8
- Number of associated clients: 128
- Setting for maximum number of associated clients
- Adjustable beacon interval
- Auto fallback data rate
- Support IAPP
- RTS/CTS and fragmentation control
- ACK timeout support
- Adjustable transmission power: 5 steps, 2dbm per step
- Wireless site survey: scanning the surrounding Wi-Fi signals
- Support IEEE 802.11e WMM and QoS

Security
- Data encryption: WEP (64/128/152 bits), WPA/WPA2 with TKIP or AES-CCMP with key's refreshing period setting
- User authentication: WEP, IEEE 802.1z, WPA-Personal, WPA-Enterprise, MAC ACL, MAC authentication using RADIUS with built-in 802.1X Authenticator
- Supports IEEE 802.11 mixed mode; open and shared key authentication
- Hidden ESSID: Enable/Disable broadcasting SSID
- Station Isolation: All associated stations can not communicate with each other when function enabled
- Supports AES data encryption over WDS link
- Built-in Layer 2 firewall, blocking Dynamic ARP inspection & DHCP Snooping

Administration
- Web-based management interface with remote configuration management and firmware upgrade capabilities
- Utilities for system configuration backup and restoration
- SNMP MIB II support (v1/v2c)
- NTP time synchronization
- Watch dog: auto recovery while detecting system fault
- Syslog client
- Support Event Log and Syslog reporting to external server
- Supports Radius accounting and accounting update
- Supports statistic on total transmission encountered and transmitting error occurred

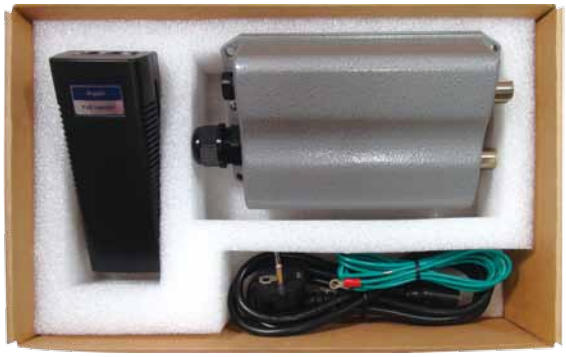
Hardware Specification
- Uplink Port: 1 x 10/100/1000 Base-T Ethernet with IEEE 802.3at PoE (as PD)
- 2 x N-type (female) connector for external antenna
- Protective vent window
- Form factor: wall or Pole mountable
- Metal case: IP68 rating

Physical and Power
- Total power consumption: 12W maximum
- Support IEEE 802.3at PD
- Form factor: wall or pole mount
- Dimension (W x D x H): 182 x 111 x 45mm (not include antenna)
- Weight: 900g (only the IWF 5210)

Environmental Specification
- Humidity 95 % (non-condensing)
- Operating Temperature: -35 to +75° C
- Storage Temperature: -40 to +80° C

Certifications
- FCC, CE
- RoHS compliant

Package Contents
- IWF 5210 x 1
- CD-ROM (with User's Manual and QIG) x 1
- Mounting Kit x 1
- Round cable x 1
- PSE 30W with power cord x 1



Ordering Information
- **IWF 5210-US (P/N: 10T00521000X0)**
- **IWF 5210-EU (P/N: 10T00521001X0)**
- **IWF 5210-JP (P/N: 10T00521002X0)**

Wireless Accessories
- **Outdoor omni-directional antenna 2.4 ~ 2.5GHz 8dBi (P/N: 603ANT0008X00)**
- **Outdoor directional antenna 5.1-5.9GHz 15dBi (P/N: 603ANT0013X00)**
- **ARRESTER DC-6 GHz N-MALE TO N-FEMALE (P/N: 7A00000066X00)**
- **Low Loss Cable, LC-CFD400L1, Length = 1M (P/N: 6023300106X00)**